II. Corrodentia: Psocidae. On a new Southern Nigerian Psocid. By Prof. R. Newstead, F.R.S.

PLATE XI. TEXT FIGURE 1.

Psocus nigeriensis, sp. n.

General colour of body dusky ochraceous, legs slightly paler than thorax with the distal extremities of the tibiae dark brown or black; spines on the legs dark brown or black; nasus sometimes with very faint traces of dark brown, interrupted, vertical markings. Antennae with the first three segments slightly paler than the thorax, the rest dark brown or blackish. Wings with the venation normal, perostigma very faintly infuscated; there is also a small faintly infuscated area immediately below the superior

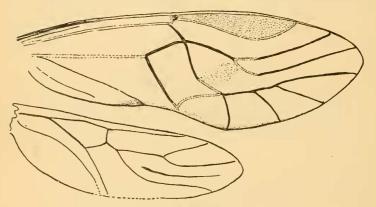


Fig. 1. Psocus nigeriensis, Newstead.

apical furcation; the transverse vein and the proximal branches of the forked vein (forming roughly the cursive numeral 4, upside down on the left and also retrograde on the right), also the veins enclosing the marginal cellules 2-4, and the major portion of the superior apical furcation, intense dark brown to blackish; the remaining portions of the veins faintly indicated and almost colourless. Eyes either partially or entirely black.

Q. Number of antennal segments doubtful (ten were counted in one individual, but this appeared to be imperfect); 1st and 2nd segments very short and the former moniliform and much stouter than the 2nd; 3rd and 4th equal in length, and about ten times longer than the 2nd. Maxillary palpi (Pl. XI, a) with the 2nd segTRANS. ENT. SOC. LOND. 1921.—PARTS III, IV. (JAN. '22)

ment nearly equal in length to the 4th, all the segments with fine stiff hairs. The long, "slender, curved, horny process" (Westwood) or maxillary fork normal (Pl. XI, b). Mandibles (Pl. XI, c) asymmetrical, tridentate distally, inner surface, at the base, with a large and somewhat quadrate tooth-plate or rasp-like structure composed of 16 rows of minute teeth (Pl. XI, cl); immediately above this on the inner margin of the right mandible is a small blunt tooth. Lingua (Pl. XI, d) composed of two broad, bladelike processes the edges of which are folded over and finely but bluntly serrate, the two structures fused in the middle line so that collectively they form a trough-like process. Pharynx or pharyngeal sclerite strongly chitinised and leading from this is a strongly defined chitinous chord or "lingual duct" (Pl. XI, d1) which bifurcates just beyond the middle distance, one branch going to each of the two blade-like structures ("lingual glands") respectively, each one terminating at the anterior margin where they are apparently connected with a small opening or channel. Tibiae of all the legs thickly clothed with long, stiff spines (Pl. XI, e) each of which is partly surrounded, at the base, by a minute coronet of short stiff spines; tarsi of two segments, those of legs ii and iii (Pl. XI, el) with a closely packed series of long stout curved spines, each surrounded by a coronet of short spines ("ctenidiobothricn"), similar to, but much larger than, those on the tibiae; on the proximal segment of leg ii there are 13 and on the distal one 3; on leg iii there are 24 and 6 respectively. Abdomen very sparsely clothed with minute hairs; distal segments (Pl. XI, f) with the sclerite of the 9th abdominal sternite of three processes, the median one more or less pointed, the laterals (Pl. XI, f2) quadrate with the distal margin furnished with small bluntly pointed spines; terminal segment with two pairs of spine-like processes (Pl. XI, f1) the lower pair much the larger.

Length of specimen restored in KOH, 3.5 mm.

Length of fore-wing, 6.3 mm.; total expanse of wings, 14 mm. approximately.

 \Im . Abdominal hairs longer and more numerous than in the \diamondsuit . Genital armature of the only example before me, has not restored sufficiently in the KOH to enable me to determine the morphological characters with any degree of exactness. I can only add that the lateral lobe-like extensions are rather thickly studded with very long hairs (Pl. XI, g) each of which is surrounded by a rosette-like pattern.

West Africa: Agege, S. Nigeria, gregarious on the bark of Pará Rubber (Hevea brasiliensis Müll. Arg.);

22.ix.17. See pp. 418-20 for an account of the habits of

this and two other species.

This somewhat remarkable species is nearly allied to *Psocus kiboschoënsis* Enderlein; * but the fore-wings are much longer and the structural characters of the pygidium of the female, together with the greater number of "ctenidiobothrien" on the tarsi, readily distinguish it.

* Der Schwedischen Zool. Exp. Kilimanjaro-Meru; 3B, p. 31, taf. 5, figs. 2, 8 (1910).

Explanation of Plate XI.

Psocus nigeriensis Newst. \mathcal{Q} : a, maxillary palpus; b, maxillary process; c, mandible; cl, compound tooth-plate; d, lingua; dl, chitinous chord; e, compound spines (etenidiobothrien); el, tarsus with the ventral compound spines; f, pygidium in profile; fl, spine-like processes; f2, one of the quadrate sclerites; f3, median sclerite; f4, the dotted ovate line indicates the position of one of the faceal pellets. g, f3: rosette-like platelette and hair on the anal lobes.